Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DONALD F. HEMMINGER

Appeal No. 2004-0820
Application No. 09/317,312

ON BRIEF

Before JERRY SMITH, THOMAS, and LEVY, Administrative Patent Judges.
LEVY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-18, which are all of the claims pending in this application.

BACKGROUND

Appellants' invention relates to synchronized web scrolling. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced as follows:

1. In a conference among multiple computers which are operated by participants, the improvement comprising the following steps:

a) detecting, in one computer, the occurrence of scrolling through a document;
b) when said scrolling terminates, ascertaining which part of the document is being displayed by said computer; and
c) after said ascertainment, transmitting to other computers data which enables them to display said part of the document.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Glaser	6,072,463	Jun. 6, 2000 (filed Apr. 17, 1995)
Furst	6,297,819	Oct. 2, 2001 (filed Nov. 16, 1998)

Claims 1, 2, 4-7 and 11-15[1] stand rejected under 35 U.S.C. § 102 (e) as being anticipated by Glaser.

Claims 3, 8-10, 17 and 18 stand rejected under 103(a) as being unpatentable over Glaser in view of Furst.

Rather than reiterate the conflicting viewpoints advanced by the examiner and appellant regarding the above-noted rejections, we make reference to the examiner's answer (Paper No. 9, mailed June 25, 2003) for the examiner's complete reasoning in support

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[1] Although the statement of the rejection (answer, page 3) does not list claims 11-15, we observe that since the body of the rejection (answer, pages 4 and 5) refers to each of these claims and sets forth the examiner's reasoning as to why the examiner considers each of these claims to be anticipated by Glaser, we consider the examiner's lack of inclusion of these claims in the statement of the rejection to have been an oversight by the examiner. Accordingly, we consider claims 11-15 to be included in the group of claims rejected under 35 U.S.C. § 102(e).

of the rejections, and to appellant's amended brief (hereinafter: brief), (Paper No. 10, filed August 28, 2003) and reply brief (Paper No. 12, filed September 2, 2003) for appellant's arguments thereagainst. Only those arguments actually made by appellant has been considered in this decision. Arguments which appellant could have made but chose not to make in the brief have not been considered.

OPINION

In reaching our decision in this appeal, we have carefully considered the subject matter on appeal, the rejections advanced by the examiner, and the evidence of anticipation and obviousness relied upon by the examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, appellant's arguments set forth in the briefs along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

Upon consideration of the record before us, we affirm-in-part and remand the application.

We observe at the outset that although appellant asserts (brief, page 1) that claims 1-18 stand rejected, that claim 16

has not been included in any of the rejections by the examiner. Upon further review of the application, we find that claim 16 has never been rejected. Claim 16 was added in an amendment filed subsequent to the first, or non-final, Office action (Paper No. 5, filed November 26, 2002). In the final rejection that followed, claim 16 was not included in any of the rejections, or referred to in the examiner's remarks. Appellant, in their responses, have not noted the fact that claim 16 does not appear in any of the rejections, in any of the examiner's Office actions. As we are not aware of the ground of rejection applied against claim 16, we conclude that claim 16 is not before us on appeal. Accordingly, in our decision, infra, we address the rejection of claims 1-15, 17 and 18, which are before us for decision on appeal, and REMAND the application to the examiner, to address the merits of claim 16, subsequent to this appeal.

We turn next to the rejection of claims 1, 2, 4-7, and 11-15 under 35 U.S.C. § 102(e) as being unpatentable over Glaser. We begin with claim 1.

To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently. In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997). As stated in In re Oelrich, 666

F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981) (quoting Hansgirg v. Kemmer, 102 F.2d 212, 214, 40 USPQ 665, 667 (CCPA 1939)) (internal citations omitted):

> Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. If, however, the disclosure is sufficient to show that the natural result flowing from the operation as taught would result in the performance of the questioned function, it seems to be well settled that the disclosure should be regarded as sufficient.

Thus, a prior art reference may anticipate when the claim limitation or limitations not expressly found in that reference are nonetheless inherent in it. See In re Oelrich, 666 F.2d at 581, 212 USPQ at 326; Verdegaal Bros., Inc. v. Union Oil Co., 814 F.2d 628, 630, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Under the principles of inherency, if the prior art necessarily functions in accordance with, or includes, the claimed limitations, it anticipates. See In re King, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986).

Appellant asserts (brief, pages 3 and 4) that even if the examiner is correct that scrolling by one party causes scrolling to occur in documents displayed to other parties, that the claims are still not met by Glaser, because the claims state that certain events occur in the remote computers after the scrolling terminates. It is argued (brief, page 5) that as everyone knows,

using Microsoft Windows (which Glaser references) you can scroll without moving the mouse. One can place the mouse over the scroll bar (top or bottom) and upon pressing the mouse button, scrolling occurs, even though the mouse has not moved. Appellant asserts (brief, pages 4 and 5) that in Glaser, if a user scrolls without moving the mouse, no coordinates are transmitted, and no scrolling is induced in the other computers. Appellant asserts (brief, page 5) that Glaser discusses copying of mouse cursors, but only when they are in the whiteboard area 60. Appellant notes that in Glaser, pointer icon 66 (figure 3) is an ordinary mouse cursor, and asserts (brief, pages 8 and 9) that in figure 4, Glaser generates an arrowhead on an audience computer, which extends from picture 54, and that arrowhead 68 is nothing more than a graphical image. Appellant further asserts (brief, page 12) that as is clear from the flowchart in figure 11, decision block 204 inquires whether the cursor is within whiteboard 60. If not, nothing happens, the logic returns to block 202. Thus, if a cursor is placed in scroll bar 62 or 64 in figure 2, it is not copied because the scroll bars lie outside whiteboard 60. It is further argued (brief, page 13) that Glaser's intent is to display other parties's cursors, not to give parties control of other parties' computers. Additionally, appellant asserts (id.)

that Glaser's flow charts of figures 11-13 only discuss displaying cursors, and not issuing commands by actuating buttons. Appellant submits (brief, page 14) that Glaser only replicates mouse-cursors which are within whiteboard 60. Appellant further asserts (brief, page 16) that "Glaser discusses 1) movement of a mouse-cursor over a whiteboard 60 on one computer's display and 2) if the movement is accompanied by pressing of a mouse-button, copies of the moving cursor are generated on the other computer, but only within whiteboard 60," and (brief, page 17) that "[t]herefore, Glaser does not replicate 'scrolling.' He only replicates mouse-cursor movements within whiteboard 60, and only if the mouse-button is depressed. Replication of scrolling would require replication of mouse-cursors over Glaser's scroll bars 62 and 64, which does not occur."

From our review of Glaser, we find that the reference is directed to a system that permits users to communicate via display screens and simultaneously point to areas of all of the user screens (col. 1, lines 11-13). The system includes a work area that serves as a video whiteboard, on which users can share information during a conference (col. 1, lines 30-32). Glaser recognizes in the Description of the Related Art that conference

systems have a single pointer icon that is shared among the conference participants. When one user is finished using the pointer, the user must relinquish control. Pointer control is then acquired by another user, or reacquired by the previous user (col. 1, lines 52-60). All conference users can have pointer icons that are simultaneously active. However, it can be confusing if there are many participants and they all try to use their pointers simultaneously, resulting in a crowded work area (col. 2, lines 1-10). From this background, Glaser asserts that there is a need for a conference support system that permits each one of multiple workstation users to control pointers during a conference (col. 2, lines 13-18). In the Summary of the Invention, Glaser discloses that the system uses multiple user terminals, which includes a display having a common working area. Each user has a pointer icon that: can be used across all of the display screens; provides a representation of all conference participants, and displays a line from the pointer icon to the representation of the user (col. 2, lines 21-31). In one aspect of the invention, each user controls a pointer icon. The user's pointer icon and the line connecting the representation of the user with the user's pointer icon is displayed on the screens of the other participants if the user has taken a specific action,

such as pressing and holding down the button on the user's mouse (col. 2, lines 36-42). Figure 1 shows a plurality of user workstations 12, 14, and 16 connected to a host network server 18 via network communication line 20 (col. 3, lines 22-26). When a user presses the mouse button, the system displays a line between the printer icon of the user and the representation of the user on the display of the other workstations (col. 3, lines 33-37). Within display 22 is a conference window 40. Conference window 40 include working space 52. Within the working space is a whiteboard 60 (col. 4, lines 16, 25, 25, 39 and 40). Conference participants can enter information into the whiteboard area and have the information displayed in the whiteboard area of all of the conference participants. Vertical scroll bar 62 and horizontal scroll bar 64 are provided at the edges of the working area (col. 4, lines 44-52). Figure 2 represents the display observed by all participants on their display devices. At the time represented by figure 2, none of the participants has pressed and held down the button on their mouse devices (col. 4, lines 56-60). Figure 3 represents the display observed by a user at the first workstation 12. The user has moved mouse pointer icon 66 into work area 60 and is pointing to the second line of the display labeled "Manufacture 40%." Figure 4 is a

representation of the display observed by the user of the second workstation when the user of the workstation has moved the pointer icon to the second line of the whiteboard area labeled "Manufacture 40%." The display shows an arrowhead 68 and a line from the representation of the first user of workstation 12 to the arrowhead 68 (col. 4, line 66 through col. 5, line 9). Figure 6 is a representation of the display observed by the user at the second workstation 14 when the user at the third workstation 16 is pointing to the first line of the whiteboard area 60 and the user of the first workstation area is pointing to the second line of the workstation area (col. 5, lines 21-26). Figure 7 additionally shows the pointer icon 66 of the user of the second workstation 14. It is noted that the user's icon is represented differently from the icons of the other users (col 5, lines 31-43).

Each workstation transmits/receives messages containing packets of information over the network. Figure 9 is a representation of the fields comprising an information packet 102. Each packet includes a header having source and target workstation IDs, a data verification section, a data section having fields for window position, window frame size, mouse

pointer icon location and mouse button status, as well as an end delimiter (col. 5, line 60 through col. 6, line 4).

In operation, the workstations monitor the network for messages in which they are identified as the target workstation. When this occurs, the workstation processes the message, incorporating the data into the window display. Alternatively, target workstations could generate a single information packet for each change of display (col. 6, lines 12-23). Conference interface 34 maintains a conference participant table containing user identification data for each participant (col. 6, lines 39-42). Glaser further discloses that when a participant points to any position on the whiteboard and presses button 38 on the mouse, a computer event is generated, in which a data signal is transmitted to the workstations of the other participants. There are two types of events. The first is a mouse button-up event indicating that the participant has not pressed the button on the mouse. The second event is a mouse button-down and coordinates event. This event provides pointer icon position data and provides an indication that the user has pressed and held down the mouse button (col. 6, lines 52-67). To reduce messages across the network, interface 34 only sends a mouse button-down and coordinates event message on the first occurrence of the

event or whenever the user changes the position of the mouse while holding down the mouse button. In this way, the user can hold the mouse button down and move the pointer icon around in his or her display window (figure 5) and information packets will be sent over the network only as needed. Figure 10 is a representation of the data fields comprising a conference participant table in which is stored conference participant information received from information packets. When a workstation receives updated mouse computer event information, the table of figure 10 is updated (col. 7, lines 1-21). Thus, the table contains sufficient information to redraw the pointers, arrowheads and connecting lines. If the mouse computer event information is a mouse button-up event, the table is cleared by deleting any existing coordinates and replacing them with a blank or null entry (col. 7, lines 22-31). In the event the table entry for the pointer icon position is blank, no arrowhead or connecting line is drawn for that user. Updating and refreshing of the displays with new computer event information provides the illusion of dynamic movement of the pointer arrow (col. 7, lines 39-45).

Figure 11 illustrates the steps followed when a participant uses their workstation to point to a data object in the work area

60. A determination is made as to whether the user has pressed the mouse button down. If not, no computer event has been generated. If the mouse has been pressed down, the CPU determines if the pointer icon is located in the whiteboard area 60. If the pointer icon is not within the whiteboard area, then the icon is not in a position of concern. If the pointer icon is within the whiteboard area 60, the CPU obtains the mouse pointer position icon location from the received packet and obtains alist of the conference participants. Next, the CPU creates a packet containing the pointer icon position location information (box 210) and sends the packet to each conference participant (col. 8, line 57 through col. 8, line 19). If the CPU determines that the pointer icon has moved, the CPU obtains the new position (box 220) and sends the updated information to each of the conference participants (col. 8, lines 20-33). The CPU then determines if the mouse has been released. If the mouse has been released, the user is no longer designating a point within the whiteboard 60, and the routine ends (box 230) (col. 8, lines 34-46). If the mouse button has not been released, processing continues.

Figure 12 shows the steps followed when the sender's machine detects that the mouse button has been released. When the CPU determines that the mouse button has been released, the mouse

pointer icon is set to a null value (col. 8, lines 49-58), and this information is sent to the conference participants.

In addition, from col. 9, line 39 through col. 10, line 10 Glaser discloses a pseudocode to provide a better understanding of the system. As set forth in the pseudocode, if the CPU detects that the mouse is pressed down and the mouse pointer icon is located within the whiteboard area 60, the workstation ID number, pointer change flag, and the pointer location data are sent to each of the conference participants (col. 10, lines 11-24). If the position of the mouse pointer icon changes and is still within the whiteboard area, updated information is sent to each of the conference participants (col. 10, lines 28-33). Glaser additionally discloses (col. 10, lines 34-38) that "[f]inally, at the pseudocode for 'ON mouseButton1 up', the Location variable is initially set to the null set. Then, because the mouse button flag data indicates that the mouse button has been released, the mouse button location data is sent to each one of the remaining conference participants."

From the disclosure of Glaser, we agree with appellant (brief, page 16) that Glaser observes one party moving a mouse cursor, and if the mouse is depressed, replicates the movement on

the other computers. However, from the disclosure of Glaser (col. 4, lines 44-55) that:

> Thus, those skilled in the art will appreciate that the conference participants can use keyboards of thier respective workstations and their display mouses and the like to enter information in the common whiteboard area 60 and have the informmation displayed in the whiteboard area of all the conference participants. A vertical scroll bar 62 is provided at the right edge of the working area and a horizontal scroll bar 64 is provided along the bottom edge of the work area. As will be familiar to those skilled in the art, the scroll bars are used to control positioning of the objects displayed in the work area

we find that because the scroll bars are used to control positioning of the objects in the work area, that upon using the scroll bars to scroll down a page shown in the whiteboard area, that the portion scrolled to will be displayed in the whiteboard area. However, this does not mean that the display will be occuring subsequent to termination of the scrolling. As Glaser is silent as how this takes place and when the display is shown on the computers of the other participants, we find that Glaser does not disclose that upon detection of the termination of scrolling, ascertaining which part of the document is being displayed by the computer, and after said ascertainment, transmitting to the other computers data which enables them to display said part of the document.

In addition, because Glaser discloses that upon releasing the mouse button within the whiteboard area, the mouse pointer icon position is set to null, we find that Glaser does not disclose scrolling in one computer, and upon detection of the termination of scrolling, ascertaining which part of the document is being displayed by the computer, and after said ascertainment, transmitting to the other computers data which enables them to display said part of the document. Thus, the issue becomes whether any of appellant's claims 1, 2, 4-7, and 11-15 are written so broadly that they read on Glaser in a manner unintended by appellant.

With respect to claim 1, we find that from the position taken by the examiner, that the examiner considers a computer event in the whiteboard area, including the use of the vertical and horizontal scrolling bars to meet the claimed "detecting, in one computer, the occurrence of scrolling through a document." Although we find, as noted by appellant (brief, page 12) that Glaser discloses the scrolling bars to be on the edges of the whiteboard, we find no disclosure that the scrolling bars are within the whiteboard area and are detected as movements of the mouse within the whiteboard. However, as explained, supra, we find that the scrolling bars of Glaser may be used to control the

positioning of objects within the whiteboard, and that this positioning of objects within the whiteboard is seen by the other participants, even though no mouse event occurs as the mouse is not within the whiteboard. However, we find any assertion that use of Glaser's scroll bars will result in upon ascertaining, after termination of scrolling, which part of the document is being displayed by the computer, and after said ascertainment, transmitting to the other computers data which enables them to display said part of the document, to be unsupported by the disclosure of Glaser. We find the examiner's assertions (answer, page 4) that Glaser discloses, "[a]fter the ascertainment, transmitting to the other computers data . . . which enables them to display said part of the document," to be speculation, and not inferences reasonably drawn from the disclosure of Glaser.

In addition, we find that if a user placed the mouse in the whiteboard area and depressed the mouse while moving the mouse downward along the displayed page and kept the mouse depressed at the bottom of the page, that the user would be scrolling down the document and that the scrolling would be detected as a computer event since the mouse is depressed and moving within the whiteboard area. Thus, the area displayed to the participant would be displayed to the other conference participants.

Accordingly, we find that this passage of claim 1 to be met by Glaser. In addition, we note that claim 1 does not recite that after the scrolling terminates, that the ascertaining step occurs automatically or immediately. Thus, upon the participant then moving the mouse over the "Manufacture 40%" line two of the displayed document, and pressing down the mouse button, the portion of the document being displayed ("Manufacture 40%") will be ascertained and the position of the mouse cursor on the whiteboard will be sent to the other participants for display of an arrowhead and line on their computer displays. Thus, we find that the ascertaining clause of claim 1 is met by Glaser as advanced by the examiner (answer, page 4, lines 4-6). However, upon pressing down the mouse over the "Manufacture 40%" of the display, the coordinates will be sent to the other participants and an arrowhead and line will be displayed on their computers. However, since the display has not changed, only the addition of the arrowhead and connecting line, it cannot be said the Glaser discloses that "after said ascertainment, transmitting to other computers data which enables them to display said part of the document" as required by claim 1, since no displaying of part of the document occurs.

From all of the above, we find that the examiner has failed to establish a prima facie case of anticipation of claim 1. Accordingly, the rejection of claim 1, and claims 2, 4, 5, and 11-14 dependent therefrom is reversed.

We turn next to independent claim 6. At the outset, we make reference to our findings, supra, with respect to the teachings of Glaser. In addition, we observe that claim 6, unlike claim 1 does not recite that after the ascertainment step, transmitting to the other computers data which enables them to display part of the document. Rather, claim 6 recites that when scrolling terminates, ascertaining a coordinate within the document which is contained within the part of the document being displayed, and transmitting a data packet to a packet-switched network for delivery to other of the multiple computers. Because claim 6 does not recite what is in the conveyed data packet, we find that the transmitting of the coordinates to provide display of the arrowhead and connecting line to be sufficient to meet claim 6. We therefore find that Glaser anticipates claim 6. Accordingly, the rejection of claim 6 under 35 U.S.C. § 102(e) is affirmed. As claim 15, which depends from claim 6 has not been separately argued, the rejection of claim 15 under 35 U.S.C. § 102(e) is affirmed.

We turn next to the rejection of independent claim 7 under 35 U.S.C. § 102(e) as being anticipated by Glaser. We make reference to our findings, supra, with respect to the teachings of Glaser. Claim 7 recites that after detecting the termination of scrolling, ascertaining the part of the document being displayed, and transmitting to other computers a coordinate which enables them to display said part of the document. As Glaser displays, after scrolling and the subsequent pressing of the mouse on the "Manufacture 40%" an arrowhead and connecting line, Glaser does not display a part of the document, as the document has already been displayed. We therefore find that the examiner has failed to establish a prima facie case of anticipation of claim 7. Accordingly, the rejection of claim 7 under 35 U.S.C. §102(e) is reversed.

We turn next to the rejection of claims 3, 8-10, 17 and 18 under 35 U.S.C. § 103(a) as being unpatentable over Glaser in view of Furst. Upon review of the record, we cannot sustain the rejection of claims 3, 8-10, 17 and 18 because Furst does not make up for the deficiencies of Glaser. Accordingly, the rejection of claims 3 and 8 under 35 U.S.C. § 103(a) is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1, 2, 4, 5, 7 and 11-14 under 35 U.S.C. § 102(e) is reversed. The decision of the examiner to reject claims 6 and 15 under 35 U.S.C. § 102(e) is affirmed. The decision of the examiner to reject claims 3, 8-10, 17 and 18 under 35 U.S.C. § 103(a) is reversed. In addition, we REMAND the application to the examiner for consideration of claim 16. This remand to the examiner pursuant to 37 CFR § 41.50(a)(1) (effective September 13, 2004, 69 Fed. Reg. 49960 (August 12, 2004), 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)) is made for further consideration of a rejection. Accordingly, 37 CFR § 41.50(a)(2) applies if a supplemental examiner's answer is written in response to this remand by the Board.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136 (a).

AFFIRMED-IN-PART AND REMANDED

JERRY SMITH
Administrative Patent Judge

JAMES D. THOMAS
Administrative Patent Judge

STUART S. LEVY
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BOARD OF PATENT APPEALS AND INTERFERENCES

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